FIG. 1

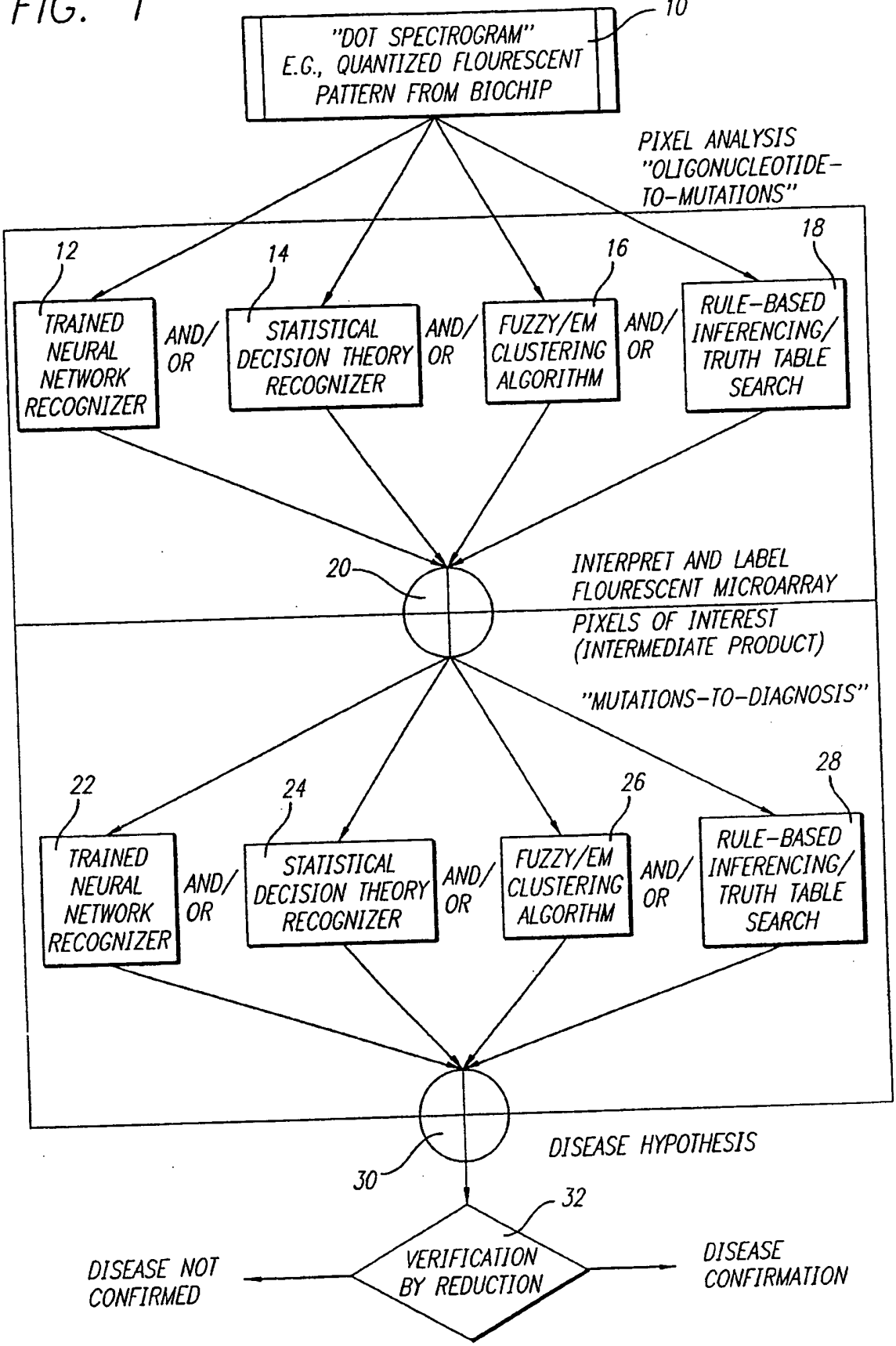
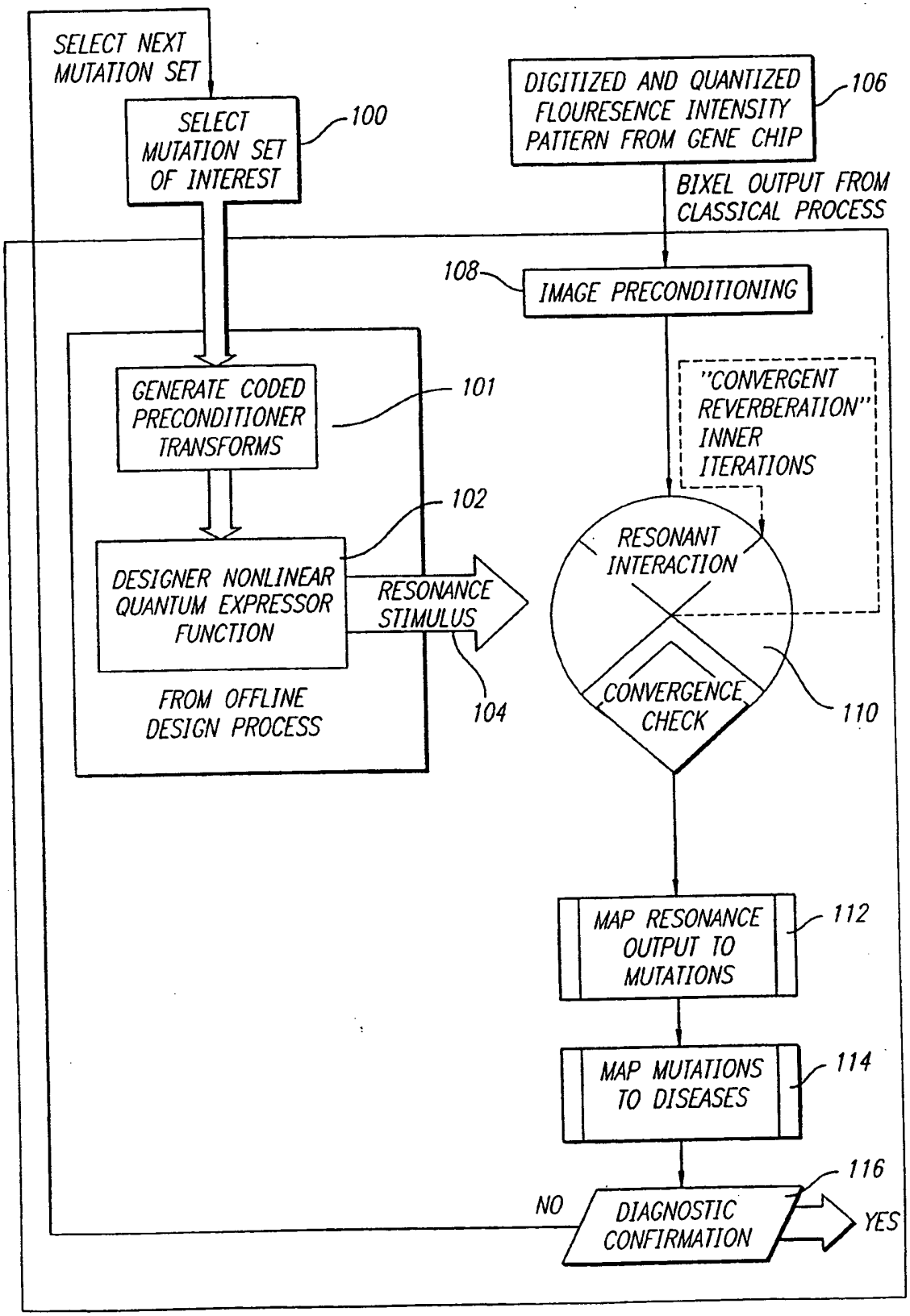

"DOT SPECTROGRAM"
E.G., QUANTIZED FLOURESCENT PATTERN FROM BIOCHIP
10
PIXEL ANALYSIS
"OLIGONUCLEOTIDE-TO-MUTATIONS"
12
TRAINED NEURAL NETWORK RECOGNIZER
AND/OR
14
STATISTICAL DECISION THEORY RECOGNIZER
AND/OR
16
FUZZY/EM CLUSTERING ALGORITHM
AND/OR
18
RULE-BASED INFERENCING/ TRUTH TABLE SEARCH
20
INTERPRET AND LABEL FLOURESCENT MICROARRAY
PIXELS OF INTEREST (INTERMEDIATE PRODUCT)
"MUTATIONS-TO-DIAGNOSIS"
22
TRAINED NEURAL NETWORK RECOGNIZER
AND/OR
24
STATISTICAL DECISION THEORY RECOGNIZER
AND/OR
26
FUZZY/EM CLUSTERING ALGORTHM
AND/OR
28
RULE-BASED INFERENCING/ TRUTH TABLE SEARCH
30
DISEASE HYPOTHESIS
32
VERIFICATION BY REDUCTION
DISEASE NOT CONFIRMED
DISEASE CONFIRMATION

FIG. 2


SELECT NEXT MUTATION SET
SELECT MUTATION SET OF INTEREST
100
DIGITIZED AND QUANTIZED FLOURESENCE INTENSITY PATTERN FROM GENE CHIP
106
BIXEL OUTPUT FROM CLASSICAL PROCESS
108
IMAGE PRECONDITIONING
GENERATE CODED PRECONDITIONER TRANSFORMS
101
"CONVERGENT REVERBERATION" INNER ITERATIONS
102
DESIGNER NONLINEAR QUANTUM EXPRESSOR FUNCTION
RESONANCE STIMULUS
RESONANT INTERACTION
FROM OFFLINE DESIGN PROCESS
104
CONVERGENCE CHECK
110
MAP RESONANCE OUTPUT TO MUTATIONS
112
MAP MUTATIONS TO DISEASES
114
116
NO
DIAGNOSTIC CONFIRMATION
YES

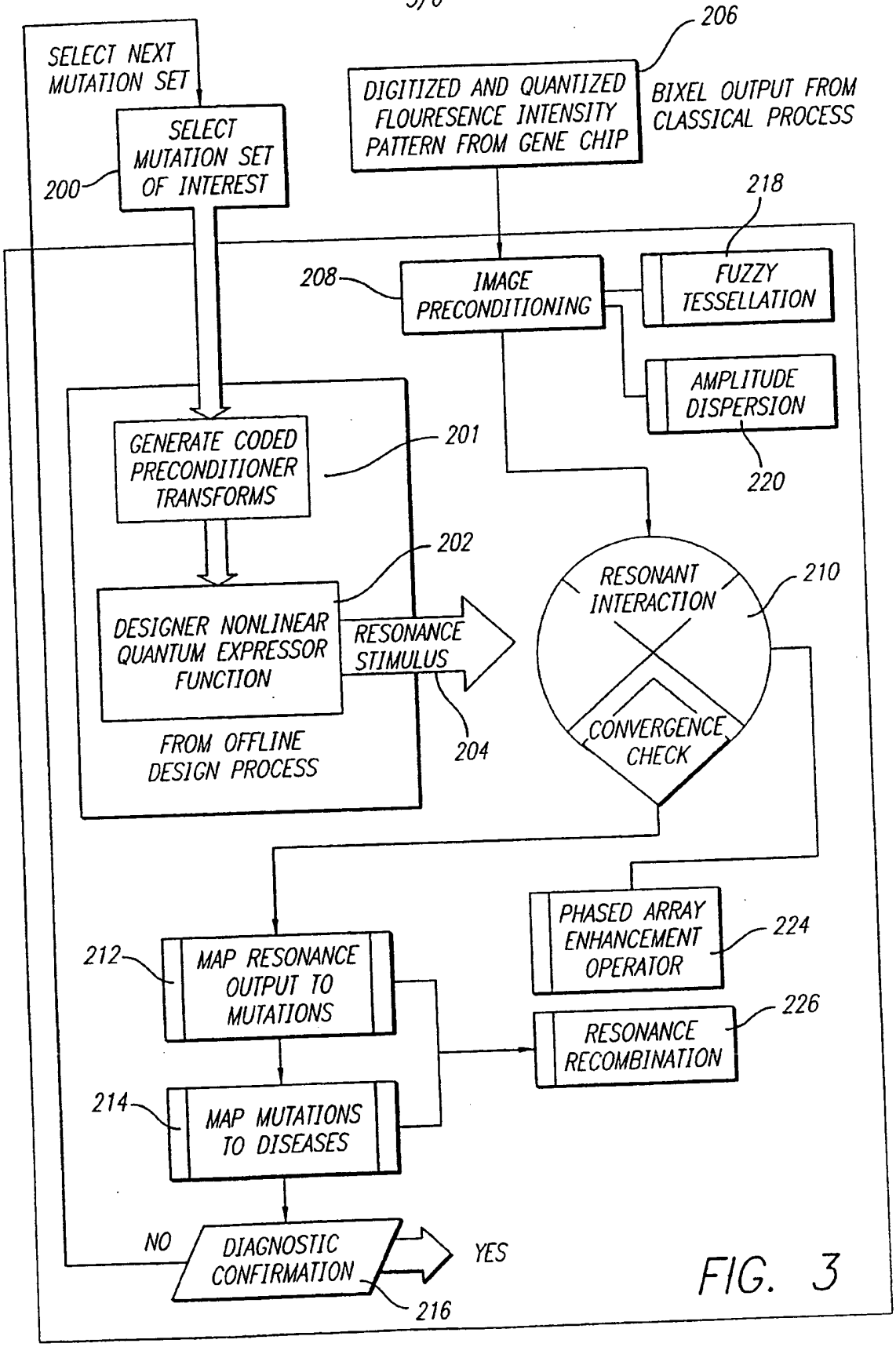

SELECT NEXT MUTATION SET
SELECT MUTATION SET OF INTEREST
200
DIGITIZED AND QUANTIZED FLOURESENCE INTENSITY PATTERN FROM GENE CHIP
206
BIXEL OUTPUT FROM CLASSICAL PROCESS
218
208
IMAGE PRECONDITIONING
FUZZY TESSELLATION
AMPLITUDE DISPERSION
220
GENERATE CODED PRECONDITIONER TRANSFORMS
201
202
DESIGNER NONLINEAR QUANTUM EXPRESSOR FUNCTION
RESONANCE STIMULUS
204
FROM OFFLINE DESIGN PROCESS
RESONANT INTERACTION
210
CONVERGENCE CHECK
PHASED ARRAY ENHANCEMENT OPERATOR
224
212
MAP RESONANCE OUTPUT TO MUTATIONS
226
RESONANCE RECOMBINATION
214
MAP MUTATIONS TO DISEASES
NO
DIAGNOSTIC CONFIRMATION
YES
216

FIG. 3

FIG. 4-A

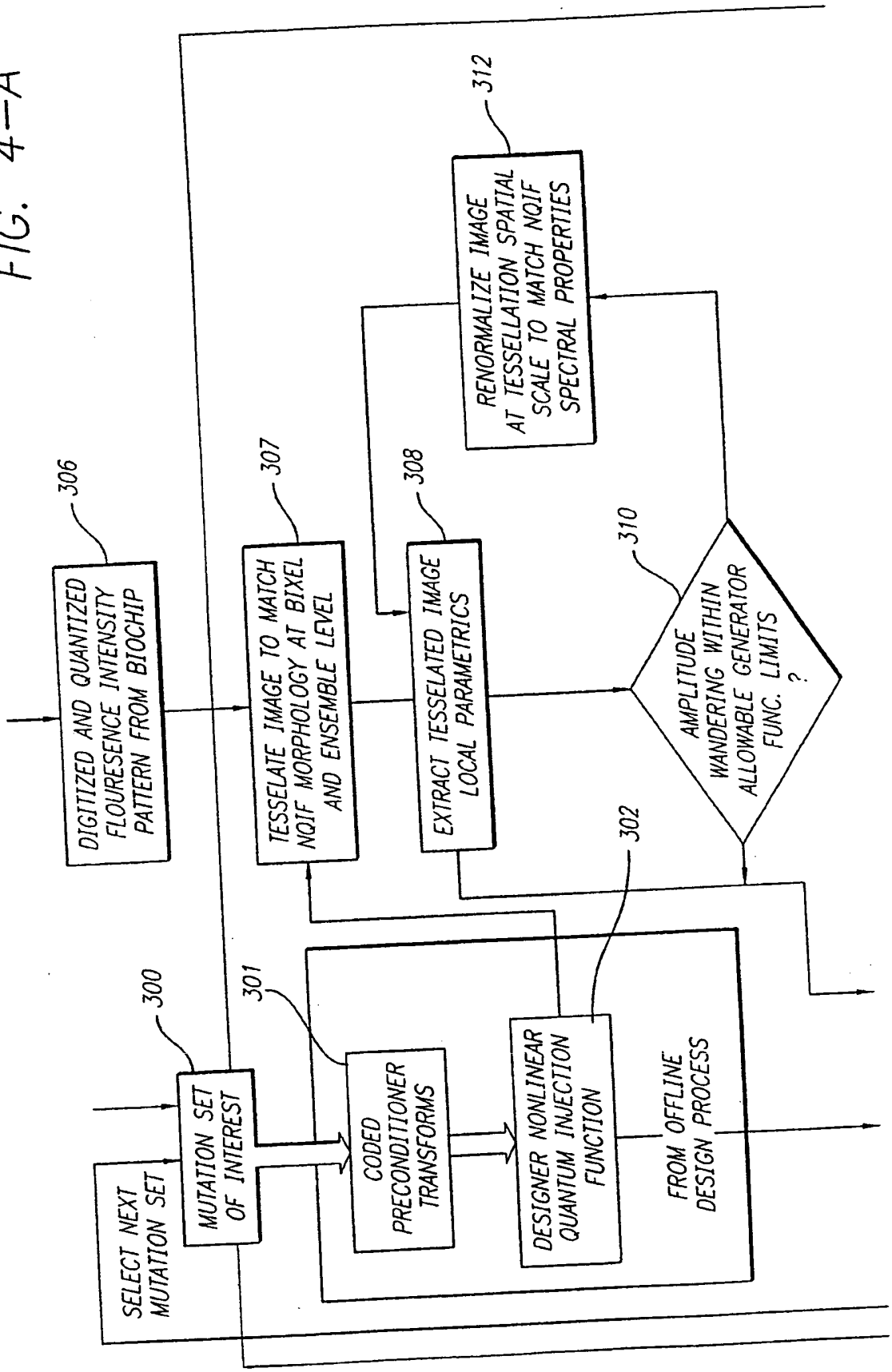
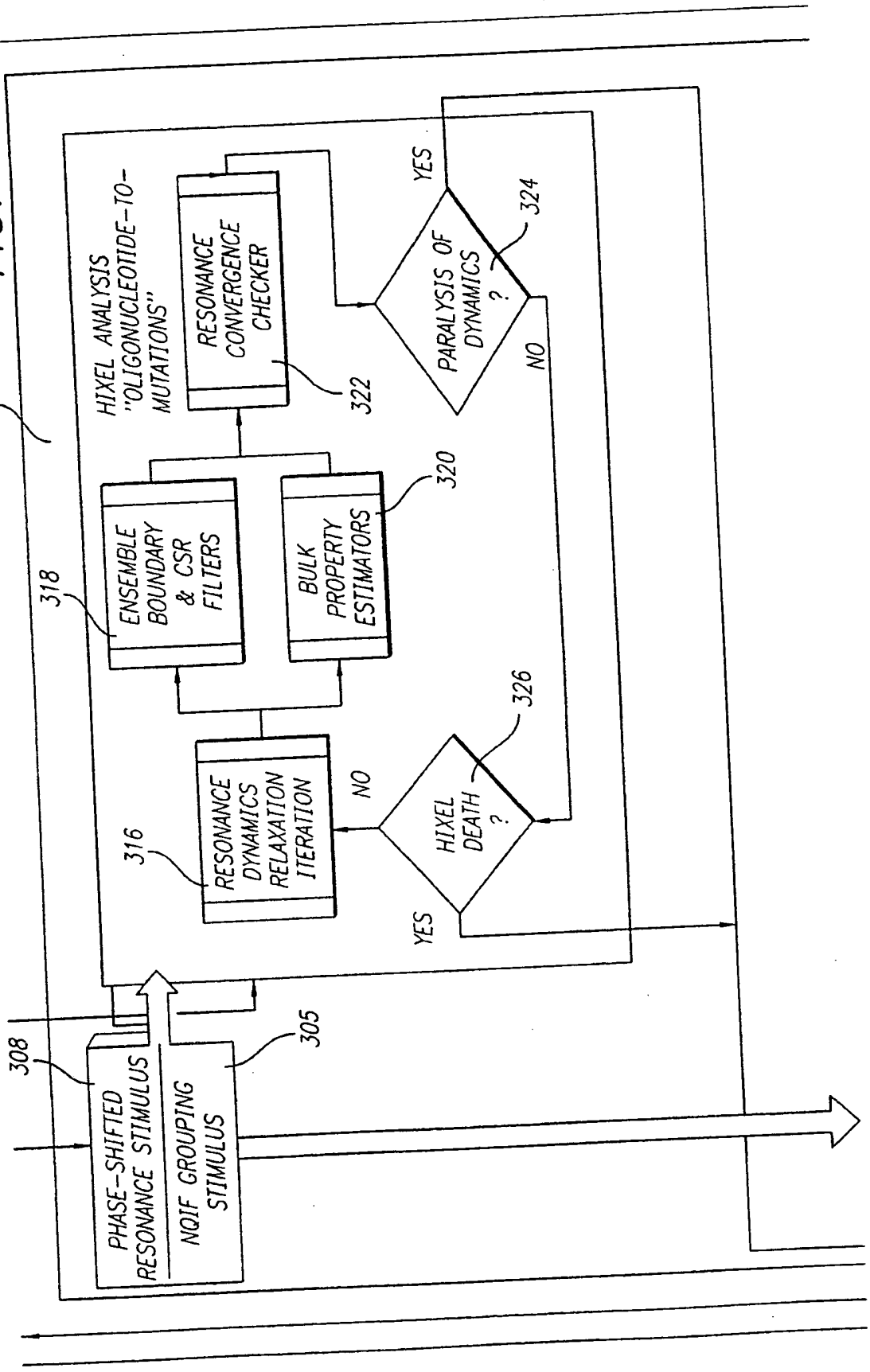

SELECT NEXT MUTATION SET
MUTATION SET OF INTEREST
300
CODED PRECONDITIONER TRANSFORMS
301
DESIGNER NONLINEAR QUANTUM INJECTION FUNCTION
302
FROM OFFLINE DESIGN PROCESS
DIGITIZED AND QUANTIZED FLOURESENCE INTENSITY PATTERN FROM BIOCHIP
306
TESSELATE IMAGE TO MATCH NQIF MORPHOLOGY AT BIXEL AND ENSEMBLE LEVEL
307
EXTRACT TESSELATED IMAGE LOCAL PARAMETRICS
308
AMPLITUDE WANDERING WITHIN ALLOWABLE GENERATOR FUNC. LIMITS ?
310
RENORMALIZE IMAGE AT TESSELLATION SPATIAL SCALE TO MATCH NQIF SPECTRAL PROPERTIES
312

FIG. 4-B


314
HIXEL ANALYSIS "OLIGONUCLEOTIDE-TO-MUTATIONS"
308
PHASE-SHIFTED RESONANCE STIMULUS
NQIF GROUPING STIMULUS
305
318
ENSEMBLE BOUNDARY & CSR FILTERS
316
RESONANCE DYNAMICS RELAXATION ITERATION
320
BULK PROPERTY ESTIMATORS
322
RESONANCE CONVERGENCE CHECKER
324
PARALYSIS OF DYNAMICS ?
326
HIXEL DEATH ?
NO
YES
NO
YES

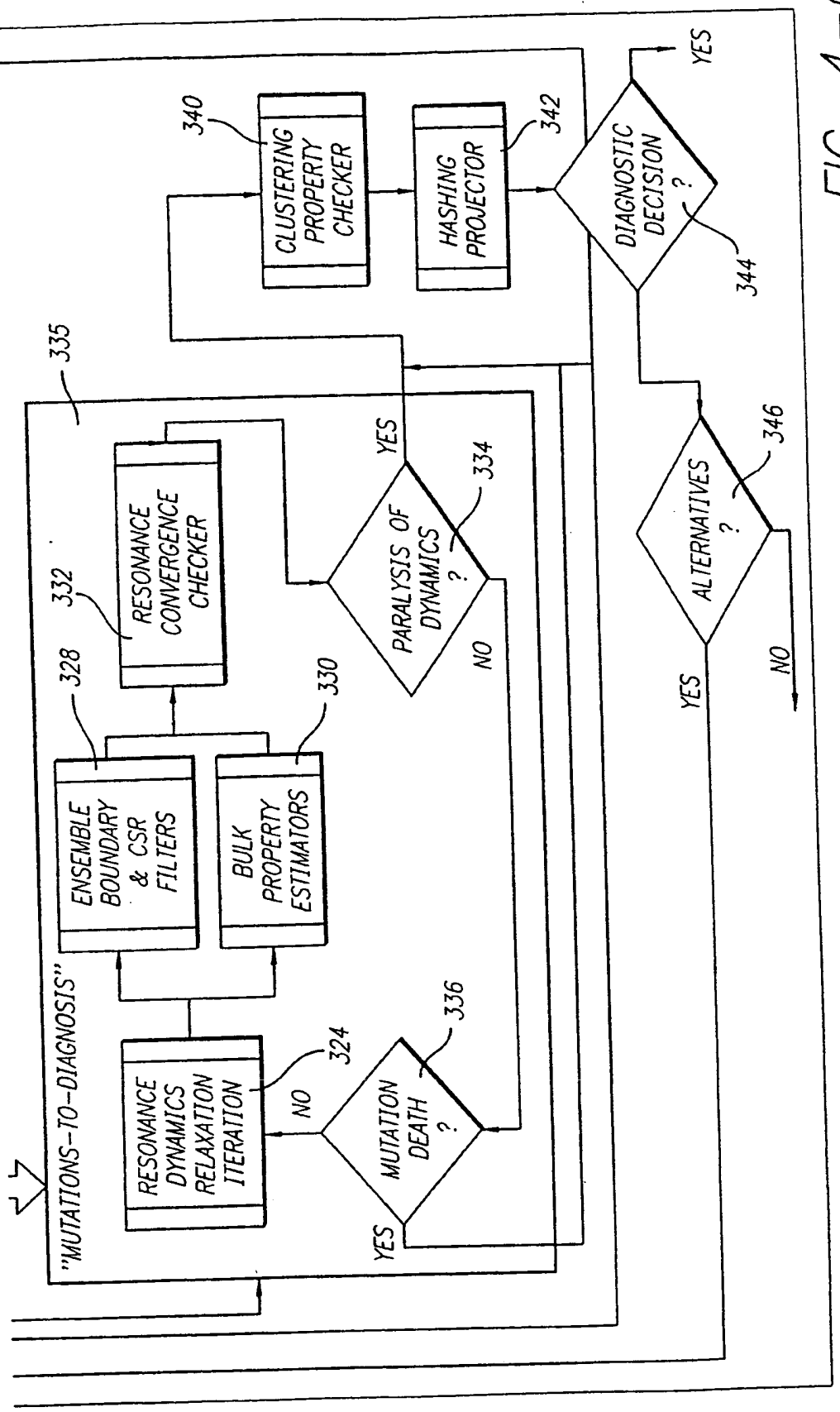

"MUTATIONS-TO-DIAGNOSIS"
RESONANCE DYNAMICS RELAXATION ITERATION
324
NO
MUTATION DEATH ?
336
YES
ENSEMBLE BOUNDARY & CSR FILTERS
328
BULK PROPERTY ESTIMATORS
330
RESONANCE CONVERGENCE CHECKER
332
335
PARALYSIS OF DYNAMICS ?
334
YES
NO
CLUSTERING PROPERTY CHECKER
340
HASHING PROJECTOR
342
DIAGNOSTIC DECISION ?
344
YES
ALTERNATIVES ?
346
YES
NO

FIG. 4-C